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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/611,521

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Patrice R. Calhoun

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EXAMINER

CHAN, SAI MING

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/611,521

Applicant(s)

CALHOUN, PATRICE R.

Examiner

Sai-Ming Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37.CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some. \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 12** is rejected under 35 U.S.C. 102(e) as being anticipated by **Ruutu et al. (U.S. Patent Publication # 20040260750)**.

Consider **claim 12**, Ruutu et al. clearly disclose and show a method for dynamically configuring a QoS mechanism for wireless sessions, comprising receiving, at a wireless network access device (figs. 1 (114), paragraphs 27-29), a session initiation message (fig. 2 (204 & 206 (session and transport protocols)); paragraph 35 (SIP is used for the detection or initiation of sessions) associated with a wireless client, the session initiation message corresponding to a session between the wireless client and an end system;

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transparently processing the session initiation message to determine a Quality-of-Service (QoS) policy (paragraph 35 (Qos info is available to signal protocol)),  
associating the QoS policy to the session (paragraph 35 (the QoS parameters))  
corresponding to the session initiation message, and  
forwarding the session initiation message (paragraph 35); and  
enforcing the QoS policy (paragraph 53) on data flows associated with the session.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating

obviousness or nonobviousness.

**Claims 1-6 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ruutu et al. (U.S. Patent Publication # 20040260750)** in view of **Tagg et al. (U.S. Patent Publication # 20050286466)**.

Consider **claim 1**, Ruutu et al. clearly disclose and show a wireless network system, comprising

a central control element (fig. 2 (204 (connection manager with access to 201, 203, 206 and other units))) for supervising (fig. 2 (204), paragraphs 40 & 41) said access elements (fig. 2 (210)), wherein the central control element is operative to manage and control (fig. 2 (204), paragraphs 40 & 41) the wireless connections between the access elements and corresponding remote client elements (fig.2 (204), paragraph 47, lines 1-3),

wherein the central control element is further operative to detect a session initiation message (fig. 2 (204 & 206 (session and transport protocols)); paragraph 35 (SIP is used for the detection or initiation of sessions) associated with a remote client element, the session initiation message corresponding to a session between the remote client element and an end system,

process the session initiation messages to determine a Quality-of-Service policy (paragraph 35 (Qos info is available to signal protocol)),

associate the QoS policy to the session (paragraph 35 (the QoS parameters))

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corresponding to the session initiation message, and

forward the session initiation message (paragraph 35);

transmit the QoS policy (paragraph 36) to a first access element to which the remote client element is associated, and

wherein the plurality of access elements are each operative to enforce the QoS policy (paragraph 53) on data flows associated with the session.

However, Ruutu et al., do not specifically disclose access elements and remote client.

In the same field of endeavor, Tagg et al. clearly shows a plurality of access elements (fig. 10 (1002, 1003 & 1004), Pa. 147) for wireless communication (paragraph 243) with at least one remote client element (fig. 10 (1001)).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., and employ access elements, as taught by Tagg et al., in order to provide an optimal communication path.

Consider **claim 2**, and **as applied to claim 1 above**, Ruutu et al., as modified by Tagg et al., clearly disclose the system as described. However, Ruutu et al. do not specifically disclose the tunnel.

Furthermore, Tagg et al. clearly disclose the establishing of a tunnel (paragraph 79, lines 1-9, fig. 4; paragraph 224) with each access element for transmission of

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wireless traffic associated with corresponding remote client elements, and

bridge network traffic (paragraph 79) between the computer network and a remote client element through a tunnel with a corresponding access element.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., and establish a tunnel, as taught by Tagg et al., in order to provide an optimal communication path.

Consider **claim 3**, and **as applied to claim 2**, Ruutu et al., as modified by Tagg et al., clearly disclose and show a system wherein the access elements are each connected to the central control element via a direct access line (fig. 2 (222 (Unified Access Driver Interface))).

Consider **claim 4**, and **as applied to claim 2 above**, Ruutu et al., as modified by Tagg et al., clearly disclose and show a system wherein the access elements are each operably coupled to the computer network (fig. 2 (222 (Unified Access Driver Interface))).

Consider **claim 5**, and **as applied to claim 1 above**, Ruutu et al., as modified by Tagg et al., clearly disclose and show the system as described.

However, Ruutu et al., as modified by Tagg et al., do not specifically disclose QoS changes in handoff.

In addition, Tagg et al. clearly shows handoff of the remote client element from the first access element to a second access element, is further operative to transmit the QoS policy to the second access element (paragraph 37, lines 6-13 (during handoff, voice or data connection is not interrupted. This means policies and QoS will be passed on from first access element to the second access element.)).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., as modified by Tagg et al., and transmit the QoS policy in handoff, as taught by Mandato et al., in order to provide an optimal communication path.

Consider **claim 6**, and **as applied to claim 1 above**, Ruutu et al., as modified by Tagg et al., clearly disclose and show a system wherein the central control element is further operative to revoke previously granted QoS guarantees provided to at least one lower priority session, if enforcement of the QoS policy with all previously configured QoS policies exceeds a limit (paragraph 44 (management functions can restrict or change the QoS of a user base on the availability of resource)).



Consider **claim 9**, and **as applied to claim 6**, Ruutu et al., as modified by Tagg et al., clearly disclose and show a system wherein the limit is a maximum number of sessions (paragraph 40 (Connection manager handles the connection setup. It will allow or deny access depending on whether the limit of sessions is reached.)).

**Claims 7 & 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruutu et al. (U.S. Patent Publication # 20040260750) in view of Tagg et al. (U.S. Patent Publication # 20050286466), and further in view of McLampy et al. (U.S. Patent Publication # 20070076603).

Consider **claim 7**, and **as applied to claim 6 above**, Ruutu et al., as modified by Tagg et al., clearly disclose and show the system as described.

However, Ruutu et al., as modified by Tagg et al., do not specifically disclose the maximum bandwidth.

In addition, McLampy et al. clearly shows the limit is the maximum bandwidth (fig.4 (342); paragraph 72; fig. 7, paragraphs 103 & 104) associated with the access element.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., as modified by Tagg et al., and show the maximum bandwidth, as taught by MeLampy et al., in order to provide an optimal communication path.

Consider **claim 8**, and **as applied to claim 6 above**, Ruutu et al., as modified by Tagg et al., clearly disclose and show the system as described.

However, Ruutu et al., as modified by Tagg et al., do not specifically disclose a configurable bandwidth limit. Furthermore, MeLampy et al. clearly shows a configurable maximum bandwidth limit (fig.4 (342); paragraph 72 (table entries are configurable)).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., as modified by Tagg et al., and show the maximum bandwidth, as taught by MeLampy et al., in order to provide an optimal communication path.

**Claims 10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ruutu et al. (U.S. Patent Publication # 20040260750)** in view of **Tagg et al. (U.S. Patent Publication # 20050286466)**, and further in view of **Belfiori et al. (U.S. Patent Publication #20060230124)**.

Consider **claim 10**, and **as applied to claim 1**, Ruutu et al. clearly disclose and show a system further comprising a SIP server (fig. 2 (206 (session and transport protocols))) including an application layer authentication mechanism (fig. 2 (203); paragraph 34, lines 5-8 (service enabler provides authentication));

and wherein the central control element is operative to

maintain security states (paragraph 40, lines 5-8 (connection manager provides security)) for remote client elements detected by the access elements,

apply, at the access elements, a security mechanism (fig. 3 (306 (contains security setting))), paragraphs 53 and 54; policies are sent to user in the system) to control access to the wireless connections to remote client elements, wherein operation of the security mechanism is based on the security states of the remote client elements,

However, Ruutu et al., as modified by Tagg et al., do not disclose the adjustment of security. In the same field of endeavor, Belfiore et al. clearly disclose the adjustment of security based on authentication (paragraphs 24 (With multiple identities, security level varies depending on which id he uses to authenticate (professional or personal))).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Ruutu et al., as modified by Tagg et al., and demonstrate the security changes, as taught by Belfiore et al., in order to provide a secure communication path.

Consider **claim 11**, and **as applied to claim 10**, Ruutu et al., as modified by

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Tagg et al., and further modified by Belfiore et al., clearly disclose and show a system as described. However, Ruutu et al., as modified by Tagg et al., and further modified by Belfiore et al., do not specifically disclose denying connections if authentication fails.

Furthermore, Tagg et al. clearly disclose that connection is denied if proper authentication fails (fig. 8, paragraph 235).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate a network system, as taught by Tagg et al., and deny access if authentication fails, as taught by Tagg et al., in order to provide a perfect communication path.

### ***Conclusion***

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

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**Hand-delivered responses** should be brought to

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Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Sai-Ming Chan whose telephone number is (571) 270-1769. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.



If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Sai-Ming Chan*  
S.C./ sc

May 10, 2007

  
  
**RAFAEL PEREZ-GUTIERREZ**  
**SUPERVISORY PATENT EXAMINER**  
3/11/07